EXECUTIVE SUMMARY

The Department of Ecology's Technical Resources for Engineering Efficiency (TREE) Team worked with Price Cold Storage to identify ways to reduce their water use and solid waste generation. Located in Naches, Price is an apple packer and part of the Rainier Fruit Company consortium of packers. The TREE team visited the Breaum Road packing and cold storage facility several times to observe the current process activities, gather information, and identify potential opportunities. This report presents the TREE Team's evaluation of this facility's opportunities for reducing water use, solid waste generation and the associated costs. A recommendation on chemical use is also included.

Estimated savings from quantified opportunities (see Table 1) could reduce solid waste generation up to 94 tons per year and water use up to 460,000 gallons per year. If extensive efforts were made to reuse water, an additional 1,230,000 gallons could be saved. A number of options could be implemented that would save a portion of those resources. TREE encourages experimentation with one or two options at a time and further progression if the savings are cost effective and product quality is not compromised.

TABLE 1: ANNUAL SAVINGS FROM QUANTIFIED OPPORTUNITIES

Opportunity	One Time Costs	Water Use	Wastewater	Solid Waste	
		Gallons	*Gallons*	*Tons*	*Cost*
Lawn Irrigation - Increase nozzle efficiency 10%	$600.	18,800.			
Spray Bars - Reduce Nozzle Size	$230.	441,000.	441,000.		
Water Reuse - Everything	$50,000.	1,230,000.	1,230,000.		
Recycle Plastic Film				3.9	$321.
Organics Composting				90.	$2,090.
Total	**$50,830.**	**1,689,800.**	**1,671,000.**	**93.9**	**$2,411.**

Additional opportunities were identified, but savings were not quantified. Non-quantifiable opportunities include:
- Select least toxic de-chlorination chemicals
- Recycle plastic film
- Compost organics (apple waste)
- Recycle office paper, aluminum, tin and plastics
- Install water meter
- Maintain lawn irrigation spray heads
- Optimize irrigation scheduling
- Reduce water use for nightly clean up
- Reuse water